SITE 005 TRACK 1 DECISION DOCUMENTATION PACKAGE, OU 10-08

### DECISION DOCUMENTATION PACKAGE COVER SHEET

#### Prepared in accordance with

# TRACK 1 SITES: GUIDANCE FOR ASSESSING LOW PROBABILITY HAZARD SITES AT THE INEEL

Site Description:

Excavation Pit/Mound and Debris East of Guard Gate 3

Site ID:

005

Operable Unit:

10-08

Waste Area Group:

10

#### I. Summary – Physical Description of the Site:

Site 005 consists of one large excavation pit/mound, two small pits, and various miscellaneous domestic debris located approximately 200 yards east of Guard Gate 3. This site was originally listed as part of an environmental baseline assessment in 1994 and identified as a potential new waste site in 1995. In accordance with Management Control Procedure-3448, "Reporting or Disturbance of Suspected Inactive Waste Sites," a new site identification form was completed for this site. As part of the process, a field team wrote a site description and collected photographs and global positioning system (GPS) coordinates of the site (the GPS coordinates are

!). The GPS coordinate system is listed as North American Datum 27, Idaho East Zone, State Plane Coordinates. The new site identification process also included a search and review of existing historical documentation.

INEEL WAG 10 and Cultural Resource personnel investigated Site 005 on June 6, 2001, and determined that the site contains both domestic and industrial features including an historic (circa pre-1920s) homestead/farm, considered a significant historical/archeological resource by the Idaho State Historic Preservation Office (SHPO). Artifacts include glass and scrap metal pieces, wire, weathered wood, empty rusted cans, a root cellar/pit made of old concrete, a lantern, toys and an old push-type lawnmower. The site formerly had two structures and wood is now scattered on the ground near the small pits and structural remains. The remains of two brick chimneys were also found at the site. Ash piles were found in two separate areas and a hand-dug canal located nearby was likely used to draw water for farming purposes.

The site also contains a large pit and mound that are probably related to INEEL operations. The mound and pit appear newer than and unrelated to the homestead site. The pit is similar in size to the mound and they resemble numerous other pits/mounds across the INEEL. Interviews with INEEL Facility Operations personnel reveal that the pits and mounds resulted from geotechnical investigations (test excavations) for potential borrow pits or fill material used for road building and miscellaneous construction activities at the INEEL.

The ground surface is covered with well-established sagebrush and native grasses. There is no indication of stained or discolored soil, buried material, or visible debris near or surrounding the gravel pit or mound.

#### **DECISION RECOMMENDATION**

#### II. SUMMARY – Qualitative Assessment of Risk:

There is no evidence that a source of contamination exists at this site, nor is there empirical, circumstantial or other evidence of contaminant migration. The reliability of information provided in this report is high. Field investigations, interviews with INEEL Cultural Resource and Facility Operations personnel, and photographs revealed no evidence of hazardous substances that may present a danger to human health or the environment. Therefore, the overall qualitative risk at Site 005 is considered low.

#### III. SUMMARY – Consequences of Error:

#### **False Negative Error:**

The possibility of contaminant levels at this site being above risk-based limits is remote. Field surveys and visual observations of the debris and surface soil indicated no evidence of hazardous constituents. If hazardous materials and wastes were placed into this area, evidence such as stained soil, odors, loss of vegetation, fibrous materials, or other indications of contamination would be present.

#### **False Positive Error:**

If further action were completed at this low risk site, funds could exceed the environmental benefit. Surface soil sampling and analysis for organic compounds, metals, radionuclides or other hazardous constituents would be needed to confirm the presence or absence of contamination. Based on existing information, there is no need for further action at this site.

#### IV. SUMMARY - Other Decision Drivers:

INEEL Cultural Resource personnel determined that this site meets the requirements as a historic resource. Based on the age of the artifacts (predate 1920s timeframe), it is a recorded SHPO site. Prior to completing any further action at this site including field investigations, screening or sampling, an intensive pedestrian inventory would need to be conducted by INEEL Cultural Resources.

#### Recommended Action:

It is recommended that this newly identified site be classified as No Further Action. Field investigations, interviews, historical knowledge of this area, and photographs indicate it is highly unlikely that hazardous or radioactive materials were generated or disposed of at this site. It is located in a remote, abandoned area with no viable pathways or receptors. The site is located in the southwestern section of the INEEL; approximately 2 miles northwest of the Central Facilities Area (CFA) and 200 yards east of Guard Gate 3. There is nothing present at this site that would indicate evidence of contaminant migration, or historical or threatened release of hazardous substances, pollutants or contaminants. This site is similar to several other debris piles across the INEEL related to homesteads or stage stops that contain domestic or agricultural waste. The gravel pit/mound is similar to numerous others located across the INEEL that served as construction/test pit operations used for road building or fill. Neither the homestead debris nor the gravel pit/mound appear to contain anything that would pose a potential risk to human health or the environment.

Signatures:	Signatures:		# Pages:	16	Date:	08/20/01
Prepared By:	Marilyn Paarmann, WPI	DOE W	AG Managei	r:		
Approved By:		Indeper	ndent Revie	w:		

## DECISION STATEMENT (DOE RPM)

Date Received: 5/24/05

Disposition: site 005 should be added to the FFA/CO in

OU 10-08. No Further Action in recommended for this

site which includes both historic homestead debris

and, possibly domester waste from CEA during the

time that CFA supported construction. The gentech
hical investigations (pits & mounds) do not

poss a rink to the aguiter

Date: 5/24/05 # Pages: /
Name: Kathleen Hain Signature: Valleen & Hain

# DECISION STATEMENT (EPA RPM)

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Date Received:	5/8/02	Site #	005	00-10-	08
Disposition:			,	•	
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and	a longe pit	and mound	be//ei	red resul	TING 
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resol	ution 15 in	accusate.	Any A	gency agr	sevent
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Date: 10/1/02		# Pages: /
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DECIS	SION STATEMENT (EPA RPM)
Date Received: 8つみ こっち	c, te 005
Disposition:	
In reviewing the	material provided
EPA believes sit	e 005 DDSe <
little Risk to 1	e out poses runn health & the
ENVINMENT and	2 agrees with the
Clussification	as no futher action
addressel	thought a said a
RIJPS prote	through 04-10-08.
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Date: 8-22-05	# Pages:
Name: VEN NS	Signature:

# **DECISION STATEMENT** (IDEQ RPM) Date Received: May 8, 2002 Disposition: Site 005 Site 005 is a large excavation pit and mound and two small pits with miscellaneous domestic debris. The site is located about 200 yards east of Guard Gate 3 and west of CFA. The site contains domestic and industrial debris including pre-1920s homestead/farm. The debris includes glass, scrape metal, wire, weathered wood, empty rusted cans, a root cellar/pit, lantern, old toys, and an old lawnmower. The remains of two buildings and chimneys are scattered near the pits and an old hand dug canal is nearby. The large pit and mound are more recent and are probably related to geotechnical investigations as related during interviews. The EPA had recommended further investigation, records search or field screening of the pit and mound. EPA proposed conducting the work under the Track 1. The State concurs with DOE that additional work is not warranted on this site. The State recommends this site for No Further Action.

# Pages:

Signature:

Date:

Name:

PROCESS/WASTE WORKSHEET	VORKSHEET	
<b>SITE ID:</b> 005	PROCESS:	Excavation Pit/Mound and Debris East of Guard Gate 3
	WASTE:	Gravel Pit and Mound / Domestic Debris
Col 1 Processes Associated with this Site	Col 2 Waste Description & Handling Procedures	Col 3 Description & Location of any Artifacts/Structures/Disposal Areas Associated with this Waste or Process
Debris discarded from a historic homestead site.	Historic artifacts and homestead structural debris abandoned by homesteaders in the early part of the twentieth century.	Artifact: Homestead Debris/ Excavation Gravel Pit/Mound
One large gravel excavation pit and mound related to INEEL activities.	Excavation pit/mound which may have been used for geotechnical test investigations conducted by INEEL personnel.	Location:  The site is located in the southwestern section of the INEEL; approximately 2 miles northwest of Central Facilities Area (CFA) and 200 yards east of Guard Gate 3.  Description:  The homestead artifacts include glass and scrap metal pieces, wire, weathered wood, empty rusted cans, a root cellar/pit made of old concrete, a lantern, toys and an old push-type lawnmower. The site formerly had two building structures with a wooden superstructure over them. The remains of two brick chimneys were found at the site, also scraps of a hard, white substance thought to be old dried white paint, hardened in the bottom of a pail were found. Ash piles were found in two separate areas and a hand-dug canal likely used for agricultural irrigation was located nearby.  The site also contains a large pit and mound likely related to INEEL operations. Anecdotal information suggests that the pit and mound resulted from geotechnical investigations (test excavations) for potential borrow pits.

CONTAMINANT WORKSHEET					
<b>SITE ID:</b> 005	PROCESS:	Excavation Pit/Mound and Debris East of Guard Gate 3	and Debris East of G	uard Gate 3	
	WASTE:	Gravel Pit and Mound / Domestic Debris	Domestic Debris		
Col 4 What Known/Potential Hazardous Substance/Constituents are Associated with this Waste or Process?	Col 5 Potential Sources Associated with this Hazardous Material	Col 6 Known/Estimated Concentration of Hazardous Substances/ Constituents	Col 7 Risk-based Concentration	Col 8 Qualitative Risk Assessment (high/med/	Col 9 Overall Reliability (high/med/ low)
	Soil	None	Not Applicable	Low	High

Question 1.	What are the waste generation processes, locations, and dates of operation associated with this site?		
glass and screed concrete root	Answer: recorded homestead site dating to the 1920s. It contains domestic artifacts including ap metal pieces, wire, weathered wood, an empty metal bucket, empty rusted cans, a cellar, a lantern, toys, an old push-type lawnmower, two building-like structures, the o brick chimneys, two ash piles, and a hand-dug canal.		
homestead si INEEL resultii	n the vicinity are a large gravel pit and mound newer than and unrelated to the te. The pit and mound are very similar in size and are like many other sites across the ng from geotechnical investigations (test excavations) for potential borrow pits (tested asalt, soil types, soil values, etc.).		
The site is located in the southwestern section of the INEEL; approximately 2 miles northwest of the Central Facilities Area (CFA) and 200 yards east of Guard Gate 3.			
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)		
Cultural Reso homesteaders	th INEEL Environmental Restoration Environmental Safety and Health (ER ES&H) and burce personnel revealed that the artifacts resulted from early twentieth century s, were domestic in nature and unrelated to INEEL activities; the pit and mound geotechnical investigations.		
Block 3	Has this INFORMATION been confirmed? ⊠ Yes ☐ No If so, describe the confirmation. (check one)		
Cultural Resc	d site investigations were conducted with ER ES&H personnel and WAG 10 and ource personnel. A prior SHPO survey was conducted by Cultural Resource personnel e age of the site and artifacts. Photographs confirm the artifacts and present condition		
Block 4	Sources of Information (check appropriate box(es) & source number from reference list)		
	2, 5 Documentation about Data Disposal Data Cess Data Cess Data Capaba C		

Question 2.	What are the disposal processes, locations, and dates of operation associated with this site? How was the waste disposed?	
Block 1	Answer:	
Site 005 is a ( (pre-1920) ho	recorded SHPO site containing historic artifacts abandoned by early twentieth century mesteaders.	
	large gravel pit and mound are located nearby. The pit and mound are newer and he homestead site.	
	cated in the southwestern section of the INEEL approximately 2 miles northwest of the ties Area (CFA) and 200 yards east of Guard Gate 3.	
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)	
abandoned b INEEL operat large excavat	10 and Cultural Resource personnel confirmed that the site includes artifacts y early homesteaders. The debris is considered domestic in nature and is unrelated to tions. This site is designated as a SHPO cultural resource. The site also contains a tion pit/mound related to INEEL road building/geotechnical research operations. Comestic debris nor the pit/mound pose a potential threat to human health or the	
Block 3	Has this INFORMATION been confirmed? ☐ Yes ☐ No If so, describe the confirmation. (check one)	
Interviews and site investigations confirm the historical value of this site, the disposal processes involved, and the estimated age of the artifacts. Photographs confirm the types of debris and current conditions of the site.		
Block 4	Sources of Information (check appropriate box(es) & source number from reference list)	
Anecdotal Historical Procurrent Procurrent Procure Photographs	Cess Data  QA Data  S	

Question 3.	Is there evidence that a source exists at this site? If so, list the sources and describe the evidence.	
Block 1	Answer:	
constituents, investigation the site conta	vidence that a source exists at Site 005. There is no evidence of hazardous disturbed vegetation, stained or discolored soil, or odors. During a June 6, 2001 site conducted by INEEL WAG 10 and Cultural Resource personnel, it was confirmed that ins domestic artifacts abandoned by early twentieth century homesteaders/farmers, pre-1920 timeframe.	
investigation	contains a large gravel excavation pit and mound resulting from geotechnical (test pit) activities. There is no visible evidence of a road leading to the mound, nor stained or discolored soil, buried material, or debris in or around the pit/mound.	
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)	
INEEL Cultural Resource personnel confirm that this site is a recorded homestead/farm and the artifacts found there are domestic in nature, very old, and unrelated to INEEL operations. The gravel pit and mound resulted from road construction or geotechnical research activities and are similar to numerous mounds found across the INEEL used for the same purpose. Neither the homestead artifacts or the pit and mound pose a potential risk to human health or the environment.		
Block 3	Has this INFORMATION been confirmed?  Yes  No If so, describe the confirmation.  (check one)	
Interviews and site investigations confirm that the site contains both domestic debris from early twentieth century homesteaders and a gravel pit and mound relating to INEEL construction or geotechnical research operations. Photographs confirm the types of debris and current conditions of the site.		
Block 4	Sources of Information (check appropriate box(es) & source number from reference list)	
Anecdotal Historical Procurrent Procurrent Procure Photograph	Cess Data  QA Data  S	

Question 4.	Is there empirical, circumstantial, or other evidence of migration? If so, what is it?			
Block 1	Answer:			
There is no evidence of migration at Site 005. Site investigations reveal no visual evidence of hazardous constituents, disturbed, stained or discolored soil areas, or odors. The vegetation appears to be well established, with the exception of the gravel mound, which would be expected because of lack of soil nutrients present. A June 6, 2001 site investigation conducted by INEEL WAG 10 and Cultural Resource personnel determined that the domestic debris is related to an early pre-1920 homestead.				
The gravel pit and mound likely resulted from INEEL related geotechnical investigations. There is no visible evidence of a road leading to the mound, nor indication of stained or discolored soil, buried material, or debris in or around the pit/mound.				
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)			
	spections and photographs of the site show that vegetation is well established and no or discoloration is present; therefore giving no indication of disturbance or the presence onts.			
Block 3	Has this INFORMATION been confirmed? ☐ Yes ☐ No If so, describe the confirmation. (check one)			
This information was confirmed through site inspections during a 1994 environmental baseline assessment and INEEL WAG 10 and Cultural Resource investigations. Photographs taken of the site show well established vegetation.				
Block 4	Sources of Information (check appropriate box(es) & source number from reference list)			
(				

Question 5.	Does site operating or disposal historical information allow estimation of the pattern of potential contamination? If the pattern is expected to be a scattering of hot spots, what is the expected minimum size of a significant hot spot?			
Block 1	Answer:			
substances of the area, odo concrete root homesteaders activities. The geotechnical radionuclides debris and gra debris and the	There is no expected pattern of potential contamination because there is no evidence of hazardous substances or radioactive materials at the site. There is no evidence of stained or discolored soil in the area, odors or visual evidence of disturbed vegetation, with the exception of the pit/mound and concrete root cellar. The site contains domestic debris abandoned by early twentieth century homesteaders. The domestic artifacts are considered to be very old, and unrelated to INEEL activities. The site also contains a large gravel pit/mound related to INEEL road construction and geotechnical research activities. The pattern of hazardous constituents (organics, metals, radionuclides, etc.) cannot be estimated without further field screening or soil sampling around the debris and gravel pit/mound; however, because of the age and weathered condition of the domestic debris and the intended use of the gravel pit/mound it is highly unlikely that contaminants would be present at levels above risk-based limits.			
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)			
This information was obtained from an environmental baseline assessment conducted in 1994, a SHPO site survey, and a subsequent site investigation conducted by INEEL WAG 10 and Cultural Resource personnel. Investigations reveal that the site contains domestic artifacts from the pre-1920 timeframe, unrelated to INEEL operations, and the pit and mound are likely related to INEEL road construction or geotechnical research activities. Photographs of the site show no stained or discolored soil areas and well established vegetation.				
Block 3	Has this INFORMATION been confirmed? ☐ Yes ☐ No If so, describe the confirmation. (check one)			
This information was confirmed through INEEL WAG 10 and Cultural Resource site inspections, photographs, interviews and Cultural Resource historical research.				
Block 4	Sources of Information (check appropriate box(es) & source number from reference list)			
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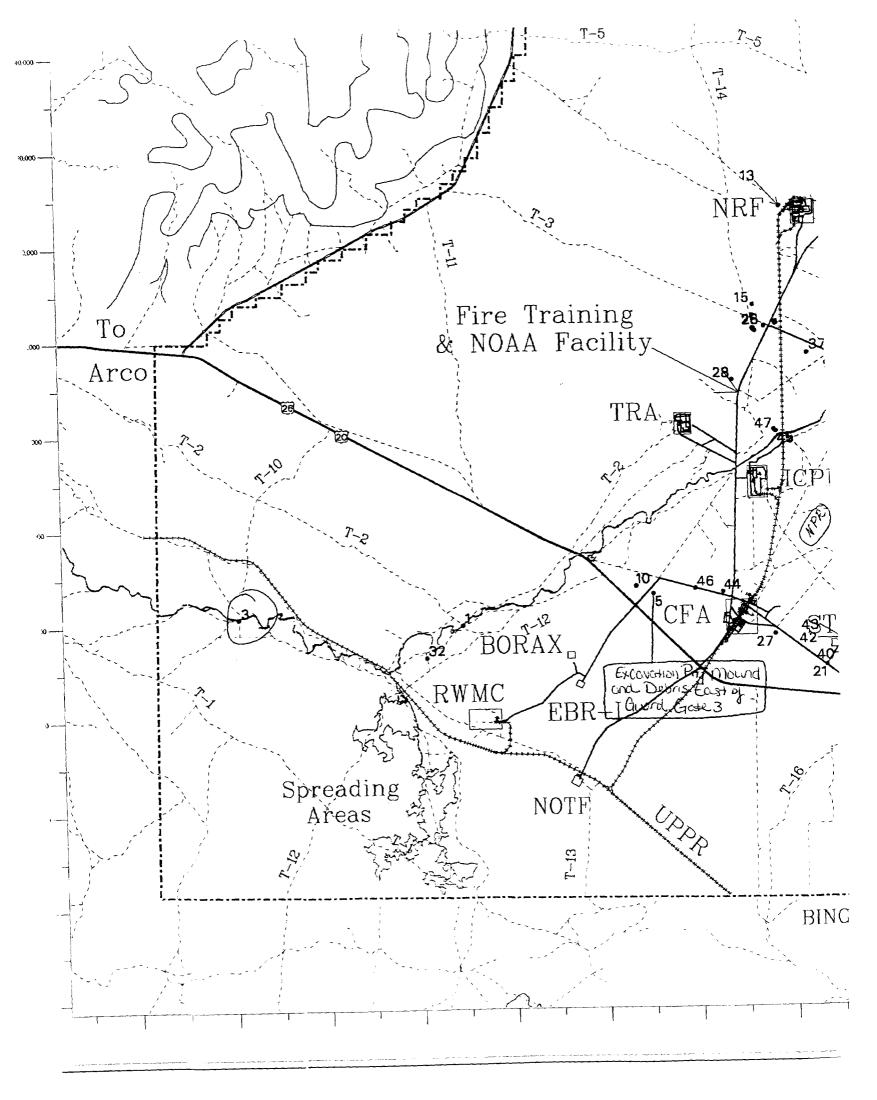
Question 6.	Estimate the length, width, and depth of the contaminated region. What is the known or estimated volume of the source? If this is an estimated volume, explain carefully how the estimate was derived.	
Block 1	Answer:	
Site investigations and photographs indicate that Site 005 covers an approximately one-quarter acre area. The domestic artifacts include glass and scrap metal pieces, a metal bucket containing dried paint, wire, weathered wood, empty rusted cans, a root cellar/pit made of old concrete, a lantern, toys, an old push-type lawnmower, two building-like structures, the remains of two brick chimneys, two ash piles, and a hand-dug canal.		
The site also contains a large gravel pit and mound related to INEEL operations (road construction or geotechnical investigations).		
There is no evidence of a source at this site or contaminated region to estimate because there is no evidence of hazardous or radioactive materials.		
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)	
This information was obtained from a 1994 environmental baseline assessment, SHPO cultural resource survey, and a recent site investigation conducted by INEEL WAG 10 and Cultural Resources personnel. Neither the assessment nor the investigations gave any indication that the site contains anything that would cause a potential risk. Photographs of the area show that the vegetation is well established, and there is no evidence of soil staining or discoloration.		
Block 3	Has this INFORMATION been confirmed? ☐ Yes ☐ No If so, describe the confirmation. (check one)	
Interviews, site investigations, photographs and INEEL Cultural Resource historical research confirm this information.		
Block 4 Sources of Information (check appropriate box(es) & source number from reference list)		
No Available Information  Anecdotal  Historical Process Data  Current Process Data  Photographs  Engineering/Site Drawings  Unusual Occurrence Report  Summary Documents  Facility SOPs  Other  Analytical Data  QA Data  Disposal Data  QA Data  D&D Report  Initial Assessment  Well Data  Construction Data		

Question 7.	What is the known or estimated quantity of hazardous substance/constituent at this source? If the quantity is an estimate, explain carefully how the estimate was derived.	
Block 1	Answer:	
The estimated quantity of hazardous substance/constituents at this site is near zero, because there is no evidence of any hazardous or radioactive material present at Site 005. The site contains domestic artifacts abandoned by early twentieth century homesteaders; the artifacts are weathered, very old and unrelated to INEEL activities.		
The large gravel pit and mound likely resulted from geotechnical investigations (test excavations) for potential borrow pits (tested for depth to basalt, soil types, soil values, etc.). There is no visible evidence of a road leading to the mound, nor indication of stained or discolored soil, buried material, or debris in or around the pit/mound.		
It is highly unlikely that the artifacts or the pit/mound pose a potential threat to human health or the environment.		
Block 2	How reliable are the information sources? ⊠ High ☐ Med ☐ Low Explain the reasoning behind this evaluation. (check one)	
This information was obtained from an environmental baseline assessment, INEEL WAG 10 and Cultural Resource investigations and photographs. There is no indication that either the debris or the gravel pit/mound contain anything that would cause potential contamination. Photographs taken of the site show well-established vegetation, giving no indication of disturbance.		
Block 3	Has this INFORMATION been confirmed?  ☐ Yes ☐ No If so, describe the confirmation. (check one)	
This information was confirmed through site inspections, interviews, photographs and INEEL Cultural Resource historical research.		
Block 4 Sources of Information (check appropriate box(es) & source number from reference list)		
	2, 5 Documentation about Data  Disposal Data  Disposal Data  DA Data  S Safety Analysis Report  Surrence Report  Dad Data  Dad Data	

Question 8.	Is there evidence that this hazardous substance/constituent is present at the source as it exists today? If so, describe the evidence.	
Block 1	Answer:	
There is no evidence that a hazardous substance or constituent is present at levels that require action at this site. INEEL WAG 10 and Cultural Resource personnel confirm that the site contains domestic debris likely abandoned by early twentieth century homesteaders. The debris is estimated to be pre-1920, domestic in nature, and unrelated to INEEL activities.		
The site also contains a large excavation pit and mound likely resulting from INEEL road construction and/or geotechnical investigations activities. There is no visible evidence of a road leading to the mound, nor indication of stained or discolored soil, buried material, or debris in or around the pit/mound.		
It is not likely that either the historic domestic artifacts or the pit/mound pose a potential threat to human health or the environment.		
Block 2	How reliable are the information sources? ⊠ High ⊠ Med ☐ Low Explain the reasoning behind this evaluation. (check one)	
This evaluation is based on interviews, site visitations and photographs of the area. The site shows no soil staining and the vegetation appears to be well established, with the exception of the gravel pit and mound, which would be expected based on lack of soil nutrients.		
Block 3	Has this INFORMATION been confirmed? ☐ Yes ☐ No If so, describe the confirmation. (check one)	
This information was confirmed through site inspections, cultural resource historical research, interviews and photographs.		
Block 4 Sources of Information (check appropriate box(es) & source number from reference list)		
No Available Information  Analytical Data  Analytical Data  Disposal Data  Current Process Data  Photographs  Engineering/Site Drawings  Unusual Occurrence Report  Summary Documents  Facility SOPs  Other  Analytical Data  Documentation about Data  Disposal Data  QA Data  D&D Report  Initial Assessment  Well Data  Construction Data		

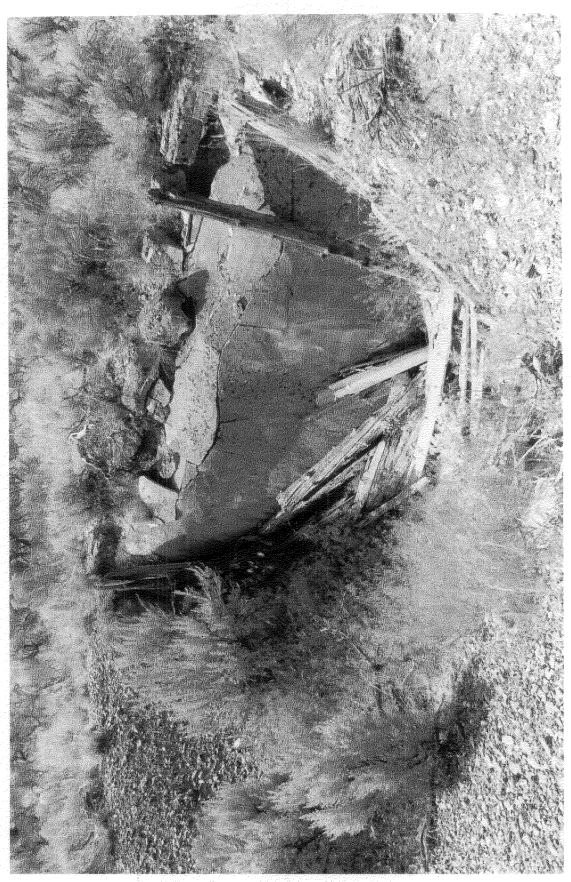
#### **REFERENCES**

- 1. DOE, 1992, Track 1 Sites: Guidance for Assessing Low Probability Sites at the INEL, DOE/ID- 10390 (92), Revision 1, U.S. Department of Energy, Idaho Falls, Idaho, July.
- 2. Interview with an Environmental Baseline Assessment team member, February 6-7, 2001.
- 3. Photographs of Site 005: PN99-0424-1-4, -5, -6,- 7, -8.
- 4. FY 1999 WAG 10 Newly Identified Sites, Volumes I and II.
- 5. Interviews with Brenda Ringe Pace, INEEL Cultural Resources Management, February 7 and May 16, 2001.
- 6. Site investigation conducted by Tom Haney, INEEL WAG 10 and Brenda Ringe, INEEL Cultural Resources Management, June 6, 2001.



### **Attachment A**

Photographs of Site #005



Site: 005 Homestead Root Cellar (PN99-0424-1-4)



Site: 005 Homestead Structural Artifacts (PN99-0424-1-5)